

Second Cycle Anchor Launch Facts

- **Twenty-four** hours before the scheduled launch, the dry dock will be moved from Pier 1 to Pier 5 where there is deeper water.
- The dry dock will be submerged **30** feet in Elliot Bay- the anchors will begin floating at **23** feet.
- The **first** to float will be the **three** **56-foot** diameter anchors and then the **seven** **46-foot** diameter anchors.
- After the anchors are towed out of the dry dock, they will be split into **two** lines of **five** anchors each.
- Foss Maritime will be operating **five** tug boats: **four** tug boats will be pulling the anchors and **one** tug to assist during the journey.
- The anchors will be traveling at a maximum speed **two** knots, or less than **two** mph. It will take about **20** hours for the anchors to travel from Seattle to Port Gamble.
- The trip from Seattle to Port Gamble is **50** miles.
- From **Seattle**, the anchors will travel from Todd Shipyards through Elliot Bay around West Point into the west side of Puget Sound, on to Skunk Bay and Point No Point, Foulweather Bluff and around Twin Spits to **Port Gamble Bay**.
- Only **five** to **eight** feet of the **29-foot** tall anchors will be above the surface of the water during the journey, depending on the size of each anchor.
- After arrival in Port Gamble, the anchors will be **moored** until they each anchor is set at Hood Canal.
- The “Emerald Sea” dry dock is 500 feet long, 50 feet tall and 140 feet wide.
- **Two** sizes of anchors were built in this **second** cycle:
 - **Seven** anchors are **46** feet in diameter
 - **Three** anchors are **56** feet in diameter
- The **ten** anchors were constructed in **four** months (March-June).
- Each anchor weighs at least **1,000** tons, equivalent in weight to about **167** male African elephants. The combined weight of these anchors is
- The new east-half of the Hood Canal Bridge will include **20** new anchors, built in two cycles of **ten**.
- All **twenty** anchors will be installed on the floor of Hood Canal by **September** 2007.
- The **first** cycle of **ten** anchors were set on the bottom of Hood Canal in **May** 2007.

East-half Replacement and West-half Retrofit Project

Start Date: August 2002

Completion Date: 2010

Project Budget: \$471 million

Major Work Items:

- Replace the east-half floating portion of the bridge
- Replace the east and west approach spans
- Replace the east and west transition spans
- Widen the west-half to allow for continuous eight-foot shoulders across the entire length of the bridge -- matching the new east-half
- Upgrade electrical systems on the west-half

Historical Facts:

- Construction began January 1958 and was opened to traffic on August 12, 1961.
- Original bridge construction cost \$26.6 million.
- The bridge was named in honor of William A. Bugge. Bugge was director of the Department of Highways from 1949 to 1963, and was a leader in the planning and construction of the bridge.
- The pontoons for the floating bridge were constructed at a graving dock along the Duwamish River in Seattle and towed by tugs to the bridge site.
- The bridge's west half failed and sank on February 13, 1979 during a storm carrying wind gusts of 120 mph and sustained winds of 85 miles per hour. The west half re-opened in October 1982.
- Replacement of the west half and rehabilitation of the east half cost \$143 million.
- Average daily traffic across Hood Canal Bridge is approximately 14,000 vehicles. Peak volumes reach 20,000 vehicles on summer weekends.
- The water depth below the floating bridge pontoons ranges from 80 to 340 feet. In its marine environment, the bridge is exposed to tide swings of 16.5 feet.
- During inclement weather, when winds of 40 mph or more are sustained for 15 minutes, the draw span is retracted (closing the bridge to vehicle traffic).